UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	08/941,459	MORIKAWA, TAKESHI
	Examiner	Art Unit
	Joseph R. Pokrzywa	2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _18 July 2003_ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _4-6,13-16 and 23-35_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _23-26_ is/are allowed.

6)☒ Claim(s) _4-6,13-16 and 27-35_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _38_ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Response to Arguments

1.   In view of the Appeal Brief filed on 7/18/03, PROSECUTION IS HEREBY

REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following

two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37

CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a

supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or

other evidence are permitted. See 37 CFR 1.193(b)(2).

2.   Applicant's arguments in the Appeal Brief filed 7/18/03, seen in pages 6-22, with respect

to the rejection(s) of claim(s) 4-6, 13-16, and 23-35 under 35 USC 103(a), have been fully

considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon

further consideration and search, a new ground(s) of rejection is made in view of a newly found

reference, noted as Sumida *et al.* (U.S. Patent Number 5,383,754).

Information Disclosure Statement

3.   The references listed in the Information Disclosure Statement submitted on 5/16/03 have

been considered by the examiner (see attached PTO-1449).

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

5.   **Claims 4-6, 13-16, 27-31, 33, and 35** are rejected under 35 U.S.C. 102(b) as being

anticipated by Sumida *et al.* (U.S. Patent Number 5,383,754).

Regarding *claim 4*, Sumida discloses an image processing device (see abstract, and Fig.

1) operable in a plurality of modes of operation (column 12, line 22 through column 17, line 23)

comprising a memory for storing pixel density data of a plurality of frames (column 24, line 50

through column 25, line 33), a controller for determining, for each frame, a state of a frame of

the pixel density data stored in the memory (column 30, line 33 through column 31, line 9, and

column 43, line 51 through column 45, line 59), an operation panel for selecting any of the

plurality of modes of operation (see Figs. 74, and 77), and a controller for comparing the state

between at least two frames (column 30, line 33 through column 31, line 9), as determined by the

state decision controller (column 31, line 14 through column 32, line 26), and for automatically

prohibiting selecting an inoperable mode of operation of the plurality of modes of operation

through the operation panel based on the result of the comparison (see Figs. 76-79, and 100-101,

column 31, line 14 through column 32, line 26, and column 80, line 6 through column 81, line 6,

and column 81, line 56 through column 82, line 3).

Regarding *claim 5*, Sumida disclose the apparatus discussed above in claim 4, and

further teaches of the state decision controller determines a length of a frame of the image data

(column 43, line 51 through column 46, line 36).

Regarding *claim 6*, Sumida disclose the device discussed above in claim 4, and further

teaches that the state decision controller determines a frame size of the frame of the pixel density

data (column 43, line 51 through column 46, line 36).

Regarding *claim 13*, Sumida discloses an image forming apparatus (see abstract, and Fig.

1) operable in a plurality of print modes (column 12, line 22 through column 17, line 23)

comprising a memory for storing pixel density data of a plurality of frames (column 24, line 50

through column 25, line 33), a printer for reading the pixel density data stored in the memory for

each frame and for printing (column 13, line 65 through column 14, line 43, and column 19, lines

4 through 30), a controller for determining, for each frame, a state of a frame of the pixel density

data stored in the memory (column 30, line 33 through column 31, line 9, and column 43, line 51

through column 45, line 59), an operation panel for selecting any of the plurality of print modes

(see Figs. 74, and 77), and a controller for comparing the state between at least two frames

(column 30, line 33 through column 31, line 9), as determined by the state decision controller

(column 31, line 14 through column 32, line 26), and for automatically prohibiting selection of

an inoperable print mode of the plurality of print modes through the operation panel based on the

result of the comparison (see Figs. 76-79, and 100-101, column 31, line 14 through column 32,

line 26, and column 80, line 6 through column 81, line 6, and column 81, line 56 through column

82, line 3).

Regarding *claim 14*, Sumida discloses the apparatus discussed above in claim 13, and

further teaches of a finisher for stapling sheets printed by the printer (column 15, lines 26

through 52), wherein the state decision controller determines whether the pixel density data

stored in the memory includes pixel density data having a frame size different than a frame size

of other pixel density data stored in the memory (column 55, lines 17 through 30), and the

selection prohibiting controller prohibits selecting a staple print mode through the operation

panel when it is determined that the memory includes pixel density data having a frame size

different than a frame size of other image data stored in the memory (column 42, line 49 through

column 43, line 37, and column 54, lines 19 through column 55, line 63), with the staple print

mode being provided so that the finisher provides a staple processing (column 55, lines 31

through 63).

Regarding *claim 15*, Sumida discloses the apparatus discussed above in claim 13, and

further teaches that the state decision controller determines whether the memory stores the pixel

density data different in frame size from other pixel density data stored in the memory (column

55, lines 17 through 30), and the selection prohibiting controller prohibits selecting a two-side

print mode through the operation panel when it is determined that the memory stores the pixel

density data different in frame size from other pixel density data stored in the memory (column

39, line 59 through column 40, line 8, column 42, line 49 through column 43, line 37, and

column 54, lines 19 through column 55, line 63), the two-side print mode being provided for

printing the pixel density data stored in the memory on both sides of a sheet (column 39, line 59

through column 40, line 8, and column 55, lines 31 through 63).

Regarding *claim 16*, Sumida discloses the apparatus discussed above in claim 13, and

further teaches that the state decision controller determines whether the pixel density data stored

in the memory all have a same frame size (column 55, lines 17 through 30), and the selection

prohibiting controller prohibits selecting an economy print mode through the operation panel

when it is determined that the pixel density data stored in the memory do not have a same frame

size (column 39, line 59 through column 40, line 8, column 42, line 49 through column 43, line

37, and column 54, lines 19 through column 55, line 63), the economy print mode being

provided for printing the pixel density data of a plurality of frames on one same side of a sheet

(see Figs. 81 and 82).

Regarding *claim 27*, Sumida discloses the device discussed above in claim 4, and further

teaches of a display for displaying an operating state of the image processing device (see Fig.

63), and a display controller, responsive to the selection prohibiting controller, for displaying on

the display an operable mode of operation of the plurality of modes of operation (see Figs. 63-

79).

Regarding *claim 28*, Sumida discloses an image processing device (see abstract, and Fig.

1) operable in a plurality of modes of operation (column 12, line 22 through column 17, line 23),

comprising a memory for storing pixel density data of a plurality of frames (column 24, line 50

through column 25, line 33), a controller for determining, for each frame, a state of a frame of

the pixel density data stored in the memory (column 30, line 33 through column 31, line 9, and

column 43, line 51 through column 45, line 59), a controller, responsive to the state decision

controller, for comparing the state between at least two frames (column 30, line 33 through

column 31, line 9), as determined by the state decision controller (column 31, line 14 through

column 32, line 26), and for determining an inoperable mode of operation of the plurality of

modes of operation based on the result of the comparison (column 80, line 6 through column 82,

line 3), and an operation panel, responsive to the selection prohibiting controller, for selecting

any of the plurality of modes of operation (see Figs. 74, and 77), with the operation panel

automatically prohibiting selecting the thus determined inoperable mode of operation (see Figs.

76-79, and 100-101, column 31, line 14 through column 32, line 26, and column 80, line 6

through column 81, line 6, and column 81, line 56 through column 82, line 3).

Regarding *claim 29*, Sumida discloses the device discussed above in claim 28, and

further teaches that the state of the frame of the pixel density data determined by the state

decision controller for each frame thereof is a frame size (column 43, line 51 through column

46, line 36).

Regarding *claim 30*, Sumida discloses the device discussed above in claim 30, and

further teaches that the plurality of modes of operation include at least one of economy print

mode, two-sided print mode, and staple print mode (column 39, line 26 through column 40, line

66).

Regarding *claim 31*, Sumida discloses an image formation apparatus (see abstract, and

Fig. 1) comprising a sensor for reading an image on an original (column 17, line 25 through

column 18, line 57), a memory for storing pixel density data read by the sensor (column 19, lines

4 through 37), means for editing pixel density data from the pixel density data stored in the

memory (column 19, lines 38 through 49), an image forming portion for using edited pixel

density data to print an image (column 13, line 65 through column 14, line 43, and column 19,

lines 4 through 30), a feeder capable of feeding originals having different sizes to an image

reading position (column 15, lines 9 through 24), means for reading mixed originals for reading a

plurality of originals collectively set in the feeder (column 17, lines 2 through 60), means for

determining a size of an image corresponding to the pixel density data of each image stored in

the memory (column 43, line 51 through column 46, line 36), and means for controlling,

responsive to the means for determining, which permits the means for editing to edit an image

when all images corresponding to the plurality of originals are uniform in size (column 39, line

43 through column 40, line 62, column 47, line 53 through column 50, line 15, and column 74,

lines 14 through 64) and otherwise prohibiting the means for editing from editing an image

(column 30, line 33 through column 31, line 26, and column 74, lines 14 through 64).

Regarding *claim 33*, Sumida discloses an image formation apparatus (see abstract, and

Fig. 1) comprising a sensor for reading an image on an original (column 17, line 25 through

column 18, line 57), a memory for storing data read by the sensor (column 19, lines 4 through

37), an image forming portion for using edited data stored in the memory to print an image

(column 13, line 65 through column 14, line 43, and column 19, lines 4 through 30), a stapler for

stapling a plurality of sheets each bearing a formed image thereon (column 15, lines 26 through

52), a feeder capable of feeding originals having different sizes to an image reading position

(column 15, lines 9 through 24), means for reading mixed originals for reading a plurality of

originals collectively set in the feeder (column 17, lines 2 through 60), means for determining a

size of an image corresponding to data of each image stored in the memory (column 43, line 51

through column 46, line 36), and means for controlling, responsive to the means for determining,

which permits the stapler to operate when all images corresponding to the plurality of originals

are uniform in size (column 39, line 43 through column 40, line 62, column 47, line 53 through

column 50, line 15, and column 74, lines 14 through 64) and otherwise prohibiting the stapler

from operating (column 30, line 33 through column 31, line 26, and column 74, lines 14 through

64).

Regarding *claim 35*, Sumida discloses an image formation apparatus (see abstract, and

Fig. 1) comprising a memory for storing pixel density data corresponding to a plurality of images

(column 19, lines 4 through 37), a print portion for forming an image on a sheet from the pixel

density data stored in the memory (column 13, line 65 through column 14, line 43, and column

19, lines 4 through 30), a stapler for stapling a plurality of printed sheets (column 15, lines 26

through 52), and a controller for which permits the stapler to operate when all of the plurality of

printed sheets have images formed thereon from the pixel density data stored in the memory

which are uniform in size (column 39, line 43 through column 40, line 62, column 47, line 53

through column 50, line 15, and column 74, lines 14 through 64) and otherwise prohibiting the

stapler from operating (column 30, line 33 through column 31, line 26, and column 74, lines 14

through 64).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   **Claims 32 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Sumida *et al.* (U.S. Patent Number 5,383,754) in view of Yoshida *et al.* (U.S. Patent Number

5,930,006, cited in the Office action dated 12/17/02).

Regarding *claim 32*, Sumida discloses the apparatus discussed above in claim 31, but

fails to teach if the means for editing pixel density data edits an image in the manner suitable for

providing two images for printing on a single side of a sheet. Yoshida discloses an image

forming apparatus that includes a means for editing an image in the manner suitable for

providing two images for printing on a single side of a sheet (column 10, lines 32 through 43,

wherein N=2). Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to include Yoshida's teachings in Sumida's system. Sumida's

system would become more versatile with the addition of Yoshida's teachings, as a user would

have added options for a desired output format.

Regarding *claim 34*, Sumida discloses an image formation apparatus (see abstract, and

Fig. 1) comprising a memory for storing pixel density data corresponding to a plurality of images

(column 19, lines 4 through 37), means for editing the pixel density data stored in the memory

(column 24, line 50 through column 27, line 8), and means for controlling, which permits the

means for editing to operate when all the pixel density data stored in the memory are uniform in

image size (column 39, line 43 through column 40, line 62, column 47, line 53 through column 50, line 15, and column 74, lines 14 through 64) and otherwise prohibiting the means for editing from operating (column 30, line 33 through column 31, line 26, and column 74, lines 14 through 64).

However, Sumida fails to specifically teach if the means for editing edits in a manner suitable for providing two images on a single side of a sheet. Yoshida discloses an image formation apparatus comprising a memory (multiport image memory 304 within memory 30, see Fig. 5) for storing image data corresponding to a plurality of images (column 6, lines 47 through 51, wherein two pages are stored, and column 7, lines 25 through 28), means for editing image data from image data stored in the memory in a manner suitable for providing two images on a single side of a sheet (column 10, lines 32 through 43, wherein N=2), and means for controlling, which permits the means for editing to operate and otherwise prohibiting the means for editing from operating (column 16, lines 17 through 55). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include Yoshida's teachings in Sumida's system. Sumida's system would become more versatile with the addition of Yoshida's teachings, as a user would have added options for a desired output format.

Allowable Subject Matter

8.   **Claims 23-26** are allowed.

9.   The following is a statement of reasons for the indication of allowable subject matter:

Regarding *claim 23*, in the examiner's opinion, it would not have been obvious to have the system, as claimed, include a memory for storing a plurality of print jobs, with each print job

containing pixel density data of at least two frames, a print-job selector for selecting one of the

plurality of print jobs stored in the memory, and a state decision controller for determining, for

each frame, a state of a frame of the pixel density data contained in the selected print-job.

The closest prior art, Sumida *et al.* (U.S. Patent Number 5,383,754), fails to teach these

limitations, and the examiner finds no motivation to combine Sumida with other references to

achieve the desired outcome. Because of this, the claims are rendered allowable.

Conclusion

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joe Pokrzywa whose telephone number is (703) 305-0146. The

examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the

organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 306-0377.

J.P.P.

Joseph R. Pokrzywa
Examiner
Art Unit 2622

jrp

EDWARD COLES
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